

B1
Amid
an electric power line comprising a plurality of sequentially connected segments wired in an interior of a vehicle from a battery, for supplying power to various kinds of loads of said vehicle;

C1
a plurality of short sensors for detecting a short circuit in at least one of said plurality of segments of said electric power lines;

a control circuit for specifying a short circuited segment of said electric power line in accordance with a short detection condition of said plurality of short sensors; and

means responsive to signals from said control circuit for removing the short circuited segment from said electric power line for supplying power to said loads.

Sub
Amid
D1
3. (Twice Amended) A power supply apparatus for a vehicle, comprising:

a battery;

a load drive electric power line wired in an interior of a vehicle from the battery through a first fuse, for driving a vehicle load;

a control circuit drive electric power line wired in said interior of said vehicle from a battery through a second fuse, for driving a control apparatus;

Sub
D1
B2
and

at least one control apparatus including a control circuit which is supplied with power from said control circuit drive electric power line ; and

a load drive circuit provided between said load drive electric power line and said load, for controlling a supply of power to said load in response to a signal from said control circuit.

7. (Twice Amended) A power supply apparatus for a vehicle, comprising:

Con: B3

a battery;

a first power supply circuit wired in an interior of a vehicle through a first fuse from the battery, for supplying power to a plurality of loads of said vehicle;

Sub
D1

a second power supply circuit wired in said interior of said vehicle through a second fuse from the battery, for supplying power to a control circuit of a control apparatus for controlling at least one load of said vehicle; and

a protection circuit for detecting a short circuit of said first power supply circuit and for implementing a protection control of said first power supply circuit through said control circuit.

Sub
DI
3
Am'd

8. (Twice Amended) A power supply apparatus for a vehicle, comprising:

a battery;

a first power supply system wired in an interior of a vehicle through a first circuit including a first fuse from the battery, for supplying power to a running control load of said vehicle;

a second power supply system wired in said interior of said vehicle through a second circuit including a second fuse from said battery, for supplying power to an equipment system load of said vehicle; and

a third power supply system wired in said interior of said vehicle through a third circuit including a third fuse from said battery, for supplying power to a control circuit for controlling said equipment system load.

(Applicant's Remarks are set forth hereinbelow, starting on the following page.)